IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A computer-implemented method for programming an embedded sensor device, the method comprising,

creating a graphical program, wherein the graphical program specifies a function to be performed by the embedded sensor device, wherein the embedded sensor device comprises one or more sensors, and wherein the embedded sensor device does not include a display;

storing the graphical program on a personal digital assistant (PDA); and

transmitting the graphical program from the PDA to the embedded sensor device over a serial link;

wherein after said transmitting, the embedded sensor device is operable to execute the graphical program to perform the specified function.

2.-3. (Cancelled)

4. (Currently Amended) The method of claim [[2]] 1, wherein the embedded sensor device comprises a compact embedded sensor device between approximately 3cm x 3cm and approximately 6cm x 6cm.

5. (Cancelled)

6. (Previously Presented) The method of claim 1, wherein said creating the graphical program is performed on the PDA.

7. (Cancelled)

8. (Original) The method of claim 1, wherein the serial link comprises a serial cable.

9. (Original) The method of claim 1, wherein the serial link comprises a wireless serial link.

10. (Original) The method of claim 9, wherein the wireless serial link comprises an infrared serial link.

11. (Currently Amended) The method of claim 10, wherein the infrared serial link comprises ~~an IrDA~~ a short-range infrared serial link.

12. (Currently Amended) The method of claim 9, wherein the wireless serial link comprises a ~~Bluetooth~~ short-range wireless serial link or an 802.11 serial link.

13. (Original) The method of claim 1, further comprising,
analyzing the graphical program for function dependencies to generate required modules;
analyzing the graphical program to determine an execution sequence; and
generating a flatfile based on the required modules and execution sequence, wherein the flatfile contains the functionality of the graphical program.

14. (Previously Presented) The method of claim 13, wherein said transmitting the graphical program from the PDA to the embedded sensor device over a serial link comprises,
transmitting the flatfile to the embedded sensor device over the serial link.

15. (Previously Presented) The method of claim 14, further comprising,
the embedded sensor device processing the flatfile to generate an executable, wherein, in the embedded sensor device being operable to execute the graphical program

to perform the specified function, the embedded sensor device is operable to execute the executable to perform the specified function.

16. (Previously Presented) The method of claim 1, further comprising,
the embedded sensor device executing the graphical program to perform the function.

17. (Previously Presented) The method of claim 16, wherein the embedded sensor device executing the graphical program generates data, the method further comprising,
the embedded sensor device sending the data to the PDA; and
the PDA displaying the data.

18. (Previously Presented) The method of claim 17, wherein the embedded sensor device sending the data to the PDA; and the PDA displaying the data are performed using a Front Panel Protocol.

19. (Previously Presented) The method of claim 17, wherein said sending the data to the PDA comprises sending the data to the PDA over a serial cable.

20. (Previously Presented) The method of claim 17, wherein sending the data to the PDA comprises sending the data to the PDA over a wireless serial link.

21. (Original) The method of claim 20, wherein the wireless serial link comprises an infrared serial link.

22. (Currently Amended) The method of claim 20, wherein the infrared serial link comprises ~~an IrDA~~ a short-range infrared serial link.

23. (Currently Amended) The method of claim 20, wherein the wireless serial link comprises a ~~Bluetooth~~ short-range wireless serial link or an 802.11 serial link.

24. (Previously Presented) The method of claim 16, wherein the embedded sensor device executing the graphical program generates data, the method further comprising,

executing a different graphical program on the PDA, wherein said executing the different graphical program comprises,

performing a discovery operation to detect and establish communications with the embedded sensor device;

retrieving the data from the embedded sensor device via a wireless serial transmission medium; and

displaying the data on the PDA.

25. (Original) The method of claim 24, wherein the wireless serial transmission medium comprises an infrared serial link.

26. (Currently Amended) The method of claim 25, wherein the infrared serial link comprises ~~an IrDA~~ a short-range infrared serial link.

27. (Currently Amended) The method of claim 25, wherein the wireless serial link comprises a ~~Bluetooth~~ short-range wireless serial link or an 802.11 serial link.

28. (Previously Presented) A computer-accessible memory medium which stores program instructions for programming an embedded sensor device, wherein the program instructions are executable by a personal digital assistant (PDA) to perform,

creating a graphical program, wherein the graphical program specifies a function to be performed by the embedded sensor device, wherein the embedded sensor device comprises one or more sensors, and wherein the embedded sensor device does not include a display;

storing the graphical program on a PDA; and

transmitting the graphical program from the PDA to the embedded sensor device over a serial link;

wherein after said transmitting, the embedded sensor device is operable to execute the graphical program to perform the specified function.

29. (Previously Presented) A system for programming an embedded sensor device, the system comprising,

a personal digital assistant (PDA), comprising,

a processor;

a memory medium coupled to the processor, wherein the memory medium stores the program and a plurality of components of a program execution system, wherein the memory medium also stores program instructions executable to analyze the program to determine a subset of the plurality of components required for execution of the program; and

a display coupled to the processor and memory medium; and

an embedded sensor device coupled to the computer system via a serial transmission medium, wherein the embedded sensor device comprises,

a processor;

a memory medium coupled to the processor, wherein the memory medium stores a minimal execution system; and

one or more sensors, coupled to the processor and memory medium, wherein the embedded sensor device does not include a display;

wherein the memory medium of the PDA further stores program instructions which are executable by the processor of the PDA to,

transmit the program and the subset of the plurality of components to the embedded sensor device over the serial transmission medium;

wherein the minimal execution system is executable by the processor of the embedded sensor device to execute the program using the subset of the plurality of components; and

wherein the PDA is operable to receive data from the embedded sensor device and display the data on the display.

30. (Original) A hand-held computer, comprising:

a processor;

a memory medium coupled to the processor, wherein the memory medium stores a graphical program, wherein the graphical program specifies a function to be performed by a sensor interface device; and

a display coupled to the processor and memory medium;

wherein the memory medium further stores program instructions which are executable by the processor to:

analyze the graphical program;

convert the graphical program into a format suitable for transmission over a serial link to the sensor interface device; and

transmit the converted graphical program from the hand-held computer to the sensor interface device over the serial link;

wherein after said transmitting, the sensor interface device is operable to execute the converted graphical program to perform the specified function; and

wherein the memory medium further stores program instructions which are executable by the processor to:

receive data from sensor interface device during execution of the converted graphical program; and

display the received data on the display.